BEFORE THE BOARD OF ENVIRONMENTAL REVIEW AND THE DEPARTMENT OF ENVIRONMENTAL QUALITY OF THE STATE OF MONTANA

In the matter of the amendment) of ARM 17.30.502, 17.30.516, 17.30.602, 17.30.607, 17.30.608, 17.30.610, 17.30.615, 17.30.619 through 17.30.629, 17.30.635, 17.30.641, 17.30.645, 17.30.650 through 17.30.658,) 17.30.702, 17.30.705, 17.30.706, 17.30.708, 17.30.715, 17.30.716, 17.30.1001, 17.30.1006, 17.30.1007, 17.36.331, 17.36.335, 17.36.336, 17.36.345, 17.55.102, 17.55.111, 17.56.507, pertaining to Department Circular WQB-7 and the adoption of new rules I and II) pertaining to outstanding resource waters

NOTICE OF PUBLIC HEARING ON PROPOSED AMENDMENT AND ADOPTION

(WATER QUALITY)
(SUBDIVISIONS)
(CECRA)
(UNDERGROUND STORAGE TANKS)

TO: All Concerned Persons

- 1. On November 29, 2005, at 10:30 a.m., the Board of Environmental Review and the Department of Environmental Quality will hold a public hearing in Room 111, Metcalf Building, 1520 East Sixth Avenue, Helena, Montana, to consider the proposed amendment and adoption of the above-stated rules.
- 2. The Board and Department will make reasonable accommodations for persons with disabilities who wish to participate in this public hearing or need an alternative accessible format of this notice. If you require an accommodation, contact the Board no later than 5:00 p.m., November 21, 2005, to advise us of the nature of the accommodation that you need. Please contact the Board Secretary at P.O. Box 200901, Helena, Montana 59620-0901; phone (406) 444-2544; fax (406) 444-4386; or email ber@mt.gov.
- 3. The rules proposed to be amended provide as follows, stricken matter interlined, new matter underlined:
- 17.30.502 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, and ARM Title 17, chapter 30, subchapters 6 and 7, apply throughout this subchapter:
- (1) "Acute toxicity" means a condition in which ambient water concentrations exceed the applicable acute aquatic life standards given in department Circular \(\text{WQB}\) \(\text{DEQ}-7\).
 - (2) "Chronic toxicity" means a condition in which ambient

water concentrations exceed the applicable chronic aquatic life standards given in department Circular $\frac{WQB}{DEQ}$ -7.

- (3) and (4) remain the same.
- (5) "Human health standard" means the parameters listed as human health standards in department Circular \(\text{WQB}\) \(\text{DEQ}-7\).
 - (6) and (7) remain the same.
- (8) "Narrative standards" means those parameters listed as narrative standards in department Circular \(\text{WQB}\) \(\text{DEQ}\)-7.
- (9) "Numeric acute standards" means the parameters listed as acute aquatic life standards in department Circular $\frac{WQB}{DEQ}$ -
- (10) "Numeric chronic standards" means the parameters listed as chronic aquatic life standards in department Circular $\frac{\text{WOB}}{\text{DEQ-7}}$.
 - (11) through (13) remain the same.
- (14) The board hereby adopts and incorporates by reference department Circular $\frac{WQB}{DEQ}$ -7, entitled "Montana Numeric Water Quality Standards" ($\frac{January}{January}$ $\frac{Ja$

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

REASON: The Board is proposing revisions to Montana's water quality rules in response to the requirements of 75-5-301(3), MCA, which requires the review and, whenever appropriate, the revision of rules relating to water quality at intervals not to exceed three years. Most of the revisions proposed by the Board fall into one of the following categories: (1) revisions to certain numeric water quality criteria and required reporting values in Circular WQB-7 (renamed Circular DEQ-7 in this rulemaking); (2) corrections of the longitude and latitude of certain stream classifications; (3) revisions to Montana's surface water quality standards for fecal coliform; (4) corrections and revisions to the mixing zone rules and nondegradation rules in ARM Title 17, chapter 30, subchapters 5 and 7; and (5) adoption of new rules pertaining to outstanding resource waters (ORWs).

In this rulemaking, the Department is proposing to amend its subdivision rules, rules implementing the Comprehensive Environmental Cleanup and Responsibility Act (CECRA), and underground storage tank rules in order to incorporate the Board's revisions to DEQ-7. The Department's CECRA program is also proposing to adopt Department Circular DEQ-4, Montana Standards for Subsurface Wastewater Treatment Systems. These amendments are necessary to ensure that the Department's programs for the regulation of remediation sites, underground storage tanks, and subdivisions will use the most current Circulars adopted by the Board on these subjects.

The proposed amendments to ARM 17.30.502 adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized below. Copies of DEQ-7 may be obtained by contacting Chris Levine, Water Quality Planning Bureau, Department of Environmental Quality, P.O. Box 200901, Helena, Montana 59620-0901; by phone at (406) 444-0371; or at http://www.deq.mt.gov/wqinfo/Standards/Index.asp.

Circular DEQ-7

- 1. The Board is proposing to change the title of Circular WQB-7 to "Circular DEQ-7". The change will make the title consistent with other Department circulars. In addition, the Board is generally revising the introduction and footnotes in DEQ-7 to eliminate repetitive information and to present the information in a more structured order. There are no substantive changes in these revisions.
- The Board is proposing to revise 73 water quality standards in DEQ-7 to reflect changes to the human health-based criteria published by the U.S. Environmental Protection Agency (EPA) under section 304(a) of the federal Clean Water Act (CWA). Specifically, in 2002, EPA published a list of nationally recommended water quality criteria (NRWQC) for human health that were revised using a new freshwater fish consumption rate of 17.5 grams/day. In 2003, EPA recalculated 15 of the NRWQC by applying a relative source contribution factor obtained from primary drinking standards developed by EPA under the Safe Drinking Water Act or new cancer potency information. Fed. Req. 75507-75515 (2003). EPA's revised NRWQC, published under section 304(a) of the CWA, are to be used by states for purposes of developing and revising state water quality In order to be consistent with and not less standards. stringent than EPA's recommended criteria, states may either adopt water quality standards based on the revised NRWQC or adopt standards using state-specific fish consumption rates and state-sponsored research. Since the Board and Department do not have the resources to conduct a statewide fish-consumption survey or to conduct the research necessary to develop human health standards, it is necessary to revise the 73 water quality standards in DEQ-7 using EPA's updated NRWQC.
- 3. The Board is proposing to revise the ground water human health standard for six parameters in DEQ-7 that are known as Polycyclic Aromatic Hydrocarbons (PAH). These revisions are necessary to reflect current EPA guidance, "Provisional Guidance for Quantitative Risk Assessment of Polycyclic Aromatic Hydrocarbons" (EPA/600/R-93/089). The proposed revisions are based upon applying the relative potency factors listed in Table 8 of the EPA guidance for the following parameters: Benz[a]anthracene; Benzo[b]fluoranthene; Benzo[k]fluoranthene; Chrysene; Dibenz[a,h]anthracene; and Indeno[1,2,3-cd]pryrene. At this time, EPA has not published individual health advisory criteria for the six PAH parameters listed above; however, the Board is proposing these changes to be consistent with current

EPA guidance. The use of the relative potency factors is explained in Footnote No. 30 of DEQ-7.

4. The Board is proposing to revise the state's human health standard for arsenic in response to the statutory requirements of 75-5-301(2) (b) (i), MCA. According to that provision, the Board is directed to adopt a human health standard for arsenic based upon the more restrictive of: (1) a value based upon a lifetime cancer risk level of one to one thousand $[1 \times 10^{-3}]$; or (2) the maximum contaminant level (MCL) published by EPA in 40 CFR, part 141.

Currently, the state's arsenic standard for surface and ground water is based upon a cancer risk level of one to one thousand [1 x 10⁻³]. Using the risk-based formula, the Board adopted standards for arsenic at 18 ug/L for surface water and 20 mg/L for ground water. At the time the risk-based standards were adopted, EPA's promulgated MCL for arsenic was 50 ug/L. The Board is proposing to change the arsenic standard for both surface and ground water to reflect EPA's revised MCL for arsenic of 10 ug/L. Since EPA's revised MCL will take effect on January 23, 2006, the Board is proposing that Montana's revised arsenic standard of 10 ug/L become effective on that same date. Footnote 29 in DEQ-7 contains the revised standard and its effective date.

- 5. The Board is proposing to change the manner in which certain aquatic life standards are listed in DEQ-7. Currently, some standards are displayed at a hardness value of 50 mg/L while others are displayed using a hardness value of 100 mg/L. The Board is proposing to list all aquatic life standards that are affected by hardness at a value of 25 mg/L. This change is necessary for consistency so that all parameters in DEQ-7 are displayed at the same hardness value. The actual method of using coefficients and calculating site-specific standards based on hardness is not being changed.
- 6. The Board is proposing to update the required reporting value (RRV) for several parameters in DEQ-7 to reflect current analytical methodologies. In some cases, data submitted using the existing RRV fails to disclose whether or not the water quality standards are being met since the RRV is greater than the standard. The updates are necessary to ensure that data received by the Department for permit compliance, ambient water quality monitoring, and restoration activities are reported at a level that will disclose whether or not water quality standards are being achieved. In addition, the Board is proposing to revise the definition of RRV in the nondegradation rule (ARM 17.30.702) to make it consistent with the definition in DEQ-7.
- 7. The Board is proposing to update the method for expressing dioxin and congeners as an equivalent concentration of 2,3,7,8 TCDD to the EPA preferred method commonly referred to as the World Health Organization (WHO) TEF method (van den Berg, M: Bosveld, ATC: et al. (1998)), Toxicity equivalency factors (TEFs) for PCBs, PCDDs, PCDFs for humans and wildlife. (Environ. Health Perspect. 106(12): 775-792). These changes are necessary to be consistent with current EPA guidance. The Board is also proposing a revision to Footnote No. 10 of DEQ-7 that would

allow the use of specific low detection limit analysis methods and RRVs on a case-by-case basis with prior Department approval. This revision is necessary to allow the Department to designate the best analytical method and corresponding reporting level for dioxin and congeners for purposes of determining compliance with the dioxin standard.

The Board is proposing to revise certain ground water standards for carcinogens to be consistent with current EPA (MCLs), drinking water health maximum contaminant levels advisories (HA), and the NRWQC. Under 75-5-301(2)(b)(i), MCA, human health standards for carcinogens (except arsenic) must be based upon the more restrictive of: (1) a value based upon a lifetime cancer risk level of one to one hundred thousand [1 x 10⁻⁵]; or (2) the MCLs published in 40 CFR Part 141. For ground water, the risk-based levels in the drinking water health advisories were used or, if not available, the NRWQC. In cases where EPA has not published criteria, a risk-based value was calculated using information from EPA's integrated risk information system (IRIS). These revisions are necessary to ensure that the state's ground water standards for carcinogens are the more restrictive of EPA's current risk-based criteria or the MCL, as required by the statute cited above.

17.30.516 STANDARD MIXING ZONES FOR SURFACE WATER (1) through (3)(d) remain the same.

- (4) The length of a standard mixing zone for flowing surface water, other than a nearly instantaneous mixing zone, must not extend downstream more than the one-half mixing width distance or extend downstream more than 10 times the stream width, whichever is more restrictive. For purposes of making this determination, the stream width as well as the discharge limitations are considered at the 7Q10 low flow. The recommended calculation to be used to determine the one-half mixing width distance for a bank discharge is described below.
 - (a) $A_{1/2} = [0.4 (W/2)^2 V] / 2\pi L$, where:
 - (i) through (6) remain the same.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The Board is proposing to amend ARM 17.30.516 in order to correct the formula used to calculate the size of a mixing zone. The amendment is necessary so that the formula in the rule is consistent with EPA's current quidance.

- 17.30.602 DEFINITIONS In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions given in 75-5-103, MCA:
 - (1) remains the same.
- (2) "Bioconcentrating parameters" means the parameters listed in department Circular $\frac{WQB}{DEQ}$ -7 which have a bioconcentration factor greater than 300.
 - (3) "Carcinogenic parameters" means the parameters

categorized as carcinogens in department Circular WQB DEQ-7.

- (4) through (13) remain the same.
- (14) "Harmful parameters" means parameters listed as harmful in department Circular $\frac{WQB}{DEQ}$ -7.
 - (15) through (20) remain the same.
- (21) "Outstanding resource water" or "ORW" has the meaning set out in 75-5-103, MCA.
- (21) through (35) remain the same, but are renumbered (22) through (36).
- $\frac{(36)}{(37)}$ "Toxic parameters" means those parameters listed as toxins in department Circular WQB DEQ-7.
- (37) through (39) remain the same, but are renumbered (38) through (40).
- $\overline{(40)}$ $\underline{(41)}$ "WQB DEQ-7" means the department circular that is adopted and incorporated by reference in ARM 17.30.619 and is entitled "Montana Numeric Water Quality Standards." This circular establishes water quality standards for toxic, carcinogenic, bioconcentration, nutrient, radioactive and harmful parameters.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The Board is proposing to add a definition of "outstanding resource water" (ORW) to subchapter 6 in order to implement New Rules I and II, which will clarify how the ORW designation affects water quality classifications and standards. See Reason for New Rules I and II, below. The proposed amendments to ARM 17.30.602 also adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

- 17.30.607 WATER-USE CLASSIFICATIONS--CLARK FORK COLUMBIA RIVER DRAINAGE EXCEPT THE FLATHEAD AND KOOTENAI RIVER DRAINAGES
- (1) The water-use classifications adopted for the Clark Fork of the Columbia River drainage are as follows:

- (ii) Hearst Lake drainage to the Lower Hearst Inlet (approximately at latitude 46.1541 46.1013, longitude -133.0384 113.0665) and Fifer Gulch drainage to the Anaconda city limits.

(v) through (xv) remain the same.

AUTH: IMP:

75-5-201, 75-5-301, MCA 75-5-301, MCA

<u>REASON:</u> Based upon the Department's detailed review of the stream classifications in ARM Title 17, chapter 30, subchapter 6, the Board is proposing amendments to those rules for purposes of correcting place names and the longitude and latitude of some of the stream classifications. The proposed amendments do not result in any substantive changes to the existing rules.
17.30.608 WATER-USE CLASSIFICATIONSFLATHEAD RIVER DRAINAGE (1) The water-use classifications adopted for the Flathead River are as follows: (a) Flathead River drainage above Flathead Lake
except waters listed in (1)(a)(i) through (viii) below B-1 (i) through (iv) remain the same. (v) Haskill Creek drainage to the Whitefish water supply intake (approximately at latitude 84.437 48.4584, longitude -114.328 114.3054)
AUTH: 75-5-201, 75-5-301, MCA IMP: 75-5-301, MCA
REASON: See Reason for amendments to ARM 17.30.607, above.
17.30.610 WATER-USE CLASSIFICATIONSMISSOURI RIVER DRAINAGE EXCEPT YELLOWSTONE, BELLE FOURCHE, AND LITTLE MISSOURI RIVER DRAINAGES (1) The water-use classifications adopted for the Missouri River are as follows: (a) Missouri River drainage to and including the Sun River drainage except tributaries listed in (1)(a)(i) through (xiii) below
of Bozeman to Dry Creek about 5 five miles east of Manhattan
<pre>(ii) through (c) (iv) remain the same. (d) Marias River drainage except the tributaries and segments listed in (1)(d)(i) through (vi) below B-2 (i) Cutbank Creek drainage except waters listed in (1)(d)(i)(A) and (B) below</pre>
(B) Cutbank Creek (mainstem) from Old Maid <u>s Miller</u> Coulee near Cut Bank to Birch <u>Two Medicine</u> Creek B-2 (ii) through (iv) remain the same. (v) Marias River mainstem from Tiber Dam to the
county road crossing in section 17 <u>11</u> , T29N, R5E B-1 (vi) through (g) remain the same. (h) Milk River drainage from the International Boundary to the Missouri River except the tributaries
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(i) Sage Creek drainage to the section line
between sections 1 and 12 T36N R5W R5E........
B-1
(ii) through (i) (iv) remain the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: See Reason for amendments to ARM 17.30.607, above.

- 17.30.615 WATER-USE CLASSIFICATIONS AND DESCRIPTIONS CONSTRUCTED DITCHES, SEASONAL AND SEMI-PERMANENT LAKES AND EPHEMERAL STREAMS (1) through (1)(h) remain the same.
- (2) This rule does not classify any specific water body. Prior to reclassifying a specific water body classified in ARM 17.30.607 through 17.30.614 under one of the water-use classifications identified in (1)(a) through (h) and before the U.S. environmental protection agency's approval of the water body's revised classification, a use attainability analysis must be conducted in accordance with 40 CFR 131.10(q), (h) and (j).

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The first sentence of (2) is proposed to be deleted because it is unnecessary. It is clear from the rest of the rule that reclassification of a water body requires separate action of the Board.

- 17.30.619 INCORPORATIONS BY REFERENCE (1) The board hereby adopts and incorporates by reference the following state and federal requirements and procedures as part of Montana's surface water quality standards:
- (a) department Circular WQB DEQ-7, entitled "Montana Numeric Water Quality Standards" (January 2004 February 2006 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive and harmful parameters;
 - (b) through (e) remain the same.
- (f) 40 CFR 136 ($\frac{\text{July 1, 2000}}{\text{July 1, 2004}}$), which establishes guidelines and procedures for the analysis of pollutants; and
 - (g) and (2) remain the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The proposed amendments to ARM 17.30.619 adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The proposed updated reference to 40 CFR Part 136 will incorporate EPA approved methods for measuring E-coli bacteria. This update is necessary to implement the proposed changes in the surface water standards to

substitute E-coli for fecal coliform. See Reason for ARM 17.30.620, below.

- <u>17.30.620</u> SPECIFIC SURFACE WATER QUALITY STANDARDS--GENERAL (1) remains the same.
- (2) Standards for organisms of the coliform group Escherichia coli bacteria are based on a minimum of five samples obtained during separate 24-hour periods during any consecutive 30-day period analyzed by the most probable number or equivalent membrane filter methods.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The Board is proposing to change the human health standard for bacteria, which has been adopted for the various stream classifications in Title 17, chapter 30, subchapter 6, and for ground water in DEQ-7. The Board is proposing to change the standard from fecal coliform (or coliform group) to Escherichia coli (E-coli) in response to current EPA recommendations. EPA is recommending that states adopt human health standards for bacteria expressed in terms of E-coli or an equivalent indicator, because E-coli is considered a better indicator of potential adverse health effects than fecal coliform. The change is necessary in order to be consistent with EPA's current guidance.

- $\underline{17.30.621}$ A-CLOSED CLASSIFICATION STANDARDS (1) and (2) remain the same.
- (3) No person may violate the following specific water quality standards for waters classified A-Closed:
- (a) The geometric mean number of organisms in the coliform group must Escherichia coli bacteria may not exceed 50 32 colony forming units per 100 milliliters.
 - (b) through (i) remain the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- <u>17.30.622 A-1 CLASSIFICATION STANDARDS</u> (1) and (2) remain the same.
- (3) No person may violate the following specific water quality standards for waters classified A-1:
- (a) The geometric mean number of organisms in the coliform group must Escherichia coli bacteria may not exceed 50 32 colony forming units per 100 milliliters if resulting from domestic sewage.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular $\frac{WQB}{DEQ}$ -7.

- (c) through (f) remain the same.
- (g) True color must not be increased more than two <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic, <u>radioactive</u>, <u>nutrient</u> or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB <u>DEO</u>-7.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards contained in department Circular WQB DEQ-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria <u>for aquatic life</u> are <u>developed adopted</u> using the procedures given in <u>the Water Quality Standards Handbook</u>, <u>Second Edition</u>, <u>EPA 823 B 94 005a</u>, <u>August 1994</u>, and provided that other routes of exposure to toxic <u>parameters by aquatic life are addressed 75-5-310, MCA</u>, the criteria <u>so developed</u> shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular <u>WQB</u> DEQ-7.
 - (k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above. The proposed amendments also adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The proposed deletion of the reference to treatment in (3)(h) is necessary to clarify that the standards in DEQ-7 apply to ambient water quality. Finally, the amendments reference Montana statute, rather than EPA guidance, as the basis for developing site-specific criteria. This change is necessary to reflect the current legal basis for site-specific criteria.

- $\underline{17.30.623}$ B-1 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified B-1:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters. The water quality standard for Escherichia coli bacteria (E-coli) varies according to season, as follows:
 - (i) from April 1 through October 31, the geometric mean

number of E-coli may not exceed 126 colony forming units per 100 milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and

- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the <u>levels</u> <u>applicable standards</u> given in department Circular <u>WQB</u> <u>DEQ</u>-7.
 - (c) through (f) remain the same.
- (g) True color must not be increased more than five <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic <u>radioactive</u>, <u>nutrient</u> or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB DEQ-7.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular $\frac{\text{WQB}}{\text{DEO}}$ -7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria for aquatic life are developed adopted using the procedures given in the Water Quality Standards Handbook, Second Edition, EPA 823 B 94 005a, August 1994, and provided that other routes of exposure to toxic parameters by aquatic life are addressed 75-5-310, MCA, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular $\frac{WQB}{DEQ}$ -7.
 - (k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- $\underline{17.30.624}$ B-2 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified B-2:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters. The water quality standard for Escherichia coli bacteria (E-coli) varies according to season, as follows:
 - (i) from April 1 through October 31, the geometric mean

number of E-coli may not exceed 126 colony forming units per 100 milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and

- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular WQB DEO-7.
 - (c) through (f) remain the same.
- (g) True color must not be increased more than five <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB DEQ-7.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular $\frac{\text{WQB}}{\text{DEO}}$ -7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria <u>for aquatic life</u> are <u>developed adopted</u> using the procedures given in the Water Quality Standards Handbook, Second Edition, EPA 823 B 94 005a, and provided that other routes of exposure to toxic parameters by aquatic life are addressed <u>75-5-310, MCA</u>, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB <u>DEQ</u>-7.

(k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- $\underline{17.30.625}$ B-3 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified B-3:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters. The water quality standard for Escherichia coli bacteria (E-coli) varies according to season, as follows:
- (i) from April 1 through October 31, the geometric mean number of E-coli may not exceed 126 colony forming units per 100

milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and

- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards specified in department Circular WOB DEO-7.
 - (c) through (f) remain the same.
- (g) True color must not be increased more than five <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic, <u>radioactive</u>, <u>nutrient</u> or harmful parameters which would remain in the water after conventional water treatment may not exceed the applicable standards set forth in department Circular WQB <u>DEO</u>-7.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular WQB DEO-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria <u>for aquatic life</u> are <u>developed adopted</u> using the procedures given in <u>the Water Quality Standards Handbook</u>, <u>Second Edition</u>, <u>EPA 823 B 94 005a</u>, <u>August 1994</u>, and provided that other routes of exposure to toxic parameters by aquatic life are addressed <u>75-5-310</u>, <u>MCA</u>, the criteria so <u>developed</u> shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards specified in department Circular WOB DEQ-7.
 - (k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- $\underline{17.30.626}$ C-1 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified C-1:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters. The water quality standard for Escherichia coli bacteria (E-coli) varies according to season, as follows:
- (i) from April 1 through October 31, the geometric mean number of E-coli may not exceed 126 colony forming units per 100

milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and

- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular $\frac{WQB}{DEQ-7}$.
 - (c) through (f) remain the same.
- (g) True color must not be increased more than five <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic, <u>radioactive</u>, <u>nutrient</u> or harmful parameters may not exceed levels which render the waters harmful, detrimental or injurious to public health. Concentrations of toxic parameters also may not exceed the applicable standards specified in department Circular WQB <u>DEQ-7</u>.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular $\frac{\text{WQB}}{\text{DEO}}$ -7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria for aquatic life are developed adopted using the procedures given in the Water Quality Standards Handbook, Second Edition, EPA 823 B 94 005a, August 1994, and provided that other routes of exposure to toxic parameters by aquatic life are addressed 75-5-310, MCA, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular $\frac{WQB}{DEQ}$ -7.
 - (k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- $\underline{17.30.627}$ C-2 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified C-2:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters. The water quality standard for Escherichia coli bacteria (E-coli) varies according to season, as follows:
 - (i) from April 1 through October 31, the geometric mean

number of E-coli may not exceed 126 colony forming units per 100 milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and

- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular WQB DEQ-7. These levels apply to all waters in the state classified C-2 except for Ashley Creek below the bridge crossing on airport road where the dissolved oxygen concentrations may not be reduced below 5 mg/l from October 1 through June 1, nor below 3 mg/l from June 2 through September 30.
 - (c) through (f) remain the same.
- (g) True color must not be increased more than five <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic, radioactive, nutrient or harmful parameters may not exceed levels which render the waters harmful, detrimental or injurious to public health. Concentrations of toxic parameters also may not exceed the applicable standards specified in department Circular WQB DEQ-7.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular $\frac{WQB}{DEQ}$ DEQ-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria for aquatic life are developed adopted using the procedures given in the Water Quality Standards Handbook, Second Edition, EPA 823 B 94 005a, August 1994, and provided that other routes of exposure to toxic parameters by aquatic life are addressed 75-5-310, MCA, the criteria so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular $\frac{WQB}{DEQ}$ -7.
 - (k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- $\underline{17.30.628}$ I CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified I:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per

100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters.

The water quality standard for Escherichia coli bacteria (Ecoli) varies according to season as follows:

- (i) from April 1 through October 31, the geometric mean number of E-coli may not exceed 126 colony forming units per 100 milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and
- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards given in department Circular $\frac{WQB}{DEQ-7}$.
 - (c) through (i) remain the same.
- (j) Beneficial uses are considered supported when the concentrations of toxic, carcinogenic, or harmful parameters in these waters do not exceed the applicable standards specified in department Circular WQB DEQ-7 when stream flows equal or exceed the flows specified in ARM 17.30.635(4) or, alternatively, for aquatic life when site-specific criteria are developed adopted using the procedures given in the Water Quality Standards Handbook, Second Edition, EPA 823 B 94 005a, August 1994, and provided that other routes of exposure to toxic parameters by aquatic life are addressed 75-5-310, MCA. The limits so developed shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards in department Circular WQB DEQ-7.
- (k) Limits for toxic, carcinogenic, or harmful parameters in new discharge permits issued pursuant to the MPDES rules (ARM Title 17, chapter 30, subchapter 13) are the larger of either the applicable standards specified in department Circular $\frac{WQB}{DEQ}$ -7, site-specific standards, or one-half of the mean instream concentrations immediately upstream of the discharge point.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- $\underline{17.30.629}$ C-3 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified C-3:
- (a) During periods when the daily maximum water temperature is greater than 60°F, the geometric mean number of organisms in the fecal coliform group must not exceed 200 per 100 milliliters, nor are 10% of the total samples during any 30 day period to exceed 400 fecal coliforms per 100 milliliters. The water quality standard for Escherichia coli bacteria (E-coli) varies according to season, as follows:

- (i) from April 1 through October 31, the geometric mean number of E-coli may not exceed 126 colony forming units per 100 milliliters and 10% of the total samples may not exceed 252 colony forming units per 100 milliliters during any 30-day period; and
- (ii) from November 1 through March 31, the geometric mean number of E-coli may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
- (b) Dissolved oxygen concentration must not be reduced below the applicable standards specified in department Circular $\frac{\text{WOB}}{\text{DEO}-7}$.
 - (c) through (f) remain the same.
- (g) True color must not be increased more than five <u>color</u> units above naturally occurring color.
- (h) Concentrations of carcinogenic, bioconcentrating, toxic, $\frac{\text{radioactive, nutrient}}{\text{nutrient}}$ or harmful parameters $\frac{\text{which would}}{\text{remain in the water after conventional water treatment}}$ may not exceed the applicable standards set forth in department Circular $\frac{\text{WQB}}{\text{DEQ}}$ -7.
- (i) Dischargers issued permits under ARM Title 17, chapter 30, subchapter 13, shall conform with ARM Title 17, chapter 30, subchapter 7, the nondegradation rules, and may not cause receiving water concentrations to exceed the applicable standards specified in department Circular $\frac{WQB}{DEQ}$ DEQ-7 when stream flows equal or exceed the design flows specified in ARM 17.30.635(4).
- (j) If site-specific criteria <u>for aquatic life</u> are <u>developed adopted</u> using the procedures given in <u>the Water Quality Standards Handbook</u>, <u>Second Edition</u>, <u>EPA 823 B 94 005a</u>, <u>August 1994</u>, and provided that other routes of exposure to toxic <u>parameters by aquatic life are addressed 75-5-310</u>, <u>MCA</u>, the criteria <u>so developed</u> shall be used as water quality standards for the affected waters and as the basis for permit limits instead of the applicable standards specified in department Circular <u>WOB</u> DEQ-7.
 - (k) remains the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

- 17.30.635 GENERAL TREATMENT STANDARDS (1) The degree of waste treatment required to restore and maintain the quality of surface waters shall be based on the surface water quality standards and the following:
 - (a) through (e) remain the same.
- (f) during periods when the maximum daily water temperature is less than 60°F, the instream fecal coliform concentrations shall be limited by the department only when necessary to protect human health.
 - (2) through (5) remain the same.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

REASON: The Board is proposing to change the standard from fecal coliform (or coliform group) to Escherichia coli (E-coli) in response to current EPA recommendations. See Reason for amendments to ARM 17.30.620, above. The proposed change includes standards based on calendar dates rather than water temperature. The proposed deletion of the temperature parameter is necessary to be consistent with the current EPA standards.

 $\underline{17.30.641}$ SAMPLING METHODS (1) Water quality monitoring, including methods of sample collection, preservation and analysis used to determine compliance with the standards must be in accordance with 40 CFR Part 136 ($\underline{July~2000}~\underline{July~1,~2004}$) or other methods allowed by the department.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

<u>REASON:</u> The proposed updated reference to 40 CFR Part 136 will incorporate EPA approved methods for measuring E-coli bacteria. This update is necessary to implement the proposed changes in the surface water standards to substitute E-coli for fecal coliform.

17.30.645 RADIOLOGICAL CRITERIA (1) No person may cause radioactive materials in surface waters to exceed the standards specified in department Circular $\frac{\text{WQB}}{\text{DEQ}}$ -7.

AUTH: 75-5-201, 75-5-301, MCA

IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

17.30.650 D-1 CLASSIFICATION STANDARDS FOR CONSTRUCTED DITCHES, SEASONAL AND SEMI PERMANENT LAKES AND EPHEMERAL STREAMS

- (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified D-1:
 - (a) remains the same.
- (b) when the daily maximum water temperature is greater than 60°F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10 percent of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
 - (3) remains the same.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- $\underline{17.30.651}$ D-2 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified D-2:
- (a) the aquatic life standards for priority pollutants listed in \(\frac{\text{WQB}}{2}\) \(\text{DEQ}-7;\)
- (b) the aquatic life standards for ammonia and other non-priority pollutants listed in $\frac{WQB}{DEQ}$ -7, unless those standards are modified or removed based upon a use attainability analysis developed for a specific water body;
 - (c) remains the same.
- (d) when the daily maximum water temperature is greater than 60°F, no permitted discharge may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- $\underline{17.30.652}$ E-1 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified E-1:
 - (a) remains the same.
- (b) when the daily maximum water temperature is greater than 60°F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
 - (3) remains the same.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- $\underline{17.30.653}$ E-2 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified E-2:
- (a) the aquatic life standards for priority pollutants listed in \(\text{WQB}\) \(\text{DEQ}-7;\)
- (b) the aquatic life standards for ammonia and other non-priority pollutants listed in $\frac{WQB}{DEQ}$ -7, unless those standards are modified or removed based upon a use attainability analysis developed for a specific water body;
 - (c) remains the same.
- (d) when the daily maximum water temperature is greater than 60°F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

REASON: The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above. The proposed amendments also adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

- $\underline{17.30.654}$ E-3 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified E-3:
- (a) when the daily maximum water temperature is greater than 60°F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period;
 - (b) and (3) remain the same.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- $\underline{17.30.655}$ E-4 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified E-4:
- (a) the acute and chronic aquatic life standards in $\frac{WQB}{DEQ}$ -7 apply;
 - (b) remains the same.
- (c) when the daily maximum water temperature is greater than 60°F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above. The proposed amendments also adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

- $\underline{17.30.656}$ E-5 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified E-5:
 - (a) remains the same.
- (b) when the daily maximum water temperature is greater than 60°F, no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml, and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.
 - (3) remains the same.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- 17.30.657 F-1 CLASSIFICATION STANDARDS (1) remains the same.
- (2) No person may violate the following specific water quality standards for waters classified F-1:
- (a) the aquatic life standards for priority pollutants listed in \(\text{WQB}\) DEQ-7;
- (b) the aquatic life standards for ammonia and other non-priority pollutants listed in \(\text{WQB}\) \(\text{DEQ}-7\), unless those standards are modified or removed based upon a use attainability analysis developed for a specific water body;
 - (c) remains the same.
- (d) when the daily maximum water temperature is greater than 60°F no permitted discharge(s) may cause the geometric mean number of organisms of the fecal coliform group to exceed 1,000 per 100 ml and 10% of the samples during any 30 day period may not exceed 2,000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above. The proposed amendments also adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

- 17.30.658 G-1 CLASSIFICATION STANDARDS (1) Waters classified G-1 are to be maintained suitable for watering wildlife and livestock, aquatic life not including fish, secondary contact recreation, and marginally suitable for irrigation after treatment or with mitigation measures. No person may violate the following specific water quality standards for waters classified G-1:
- (a) when the daily maximum water temperature is greater than 60°F the geometric mean number of organisms of the fecal coliform group may not exceed 1000 per 100 ml and no more than 10% of the samples during any 30 day period may exceed 2000 fecal coliforms per 100 ml the geometric mean number of Escherichia coli bacteria may not exceed 630 colony forming units per 100 milliliters and 10% of the samples may not exceed 1,260 colony forming units per 100 milliliters during any 30-day period;
 - (b) remains the same.
- (c) the surface and ground water standards listed in $\frac{\text{WQB}}{\text{DEQ}}\text{-7}$ do not apply.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments substitute E-coli for fecal coliform. See Reason for amendments to ARM 17.30.620, above.

- 17.30.702 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter (Note: 75-5-103, MCA, includes definitions for "degradation", "existing uses", "high quality waters", "mixing zone" and "parameter."):
- (1) "Bioconcentrating parameters" means the parameters listed in department Circular $\frac{WQB}{DEQ}$ -7 which have a bioconcentration factor greater than 300.
- (2) "Carcinogenic parameters" means the parameters listed as carcinogens in department Circular $\frac{WQB}{DEQ}$ -7.
 - (3) through (5) remain the same.
- (6) "Harmful parameters" means the parameters listed as harmful in department Circular $\frac{WQB}{DEQ}$ -7.
 - (7) remains the same.
- (8) "High quality waters" is defined in 75-5-103 $\frac{(9)(10)}{(10)}$, MCA, and does not include eClass I surface waters (ARM 17.30.628) or Class III or eClass IV ground waters (ARM $\frac{17.30.1002(d)}{(17.30.1006(3))}$ through $\frac{(4)}{(4)}$).
 - (9) through (17) remain the same.
- (18) "New or increased source" means an activity resulting in a change of existing water quality occurring on or after April 29, 1993. The term does not include the following:
 - (a) through (c) remain the same.
- (d) activities or categories of activities causing nonsignificant changes in existing water quality pursuant to ARM 17.30.670, 17.30.715, 17.30.716, or 75-5-301(5)(c), MCA.
 - (19) remains the same.
- (20) "Outstanding resource waters" or "ORW" means all state waters that are located in national parks, national wilderness or primitive areas. ORW also means state waters that have been identified as possessing outstanding ecological, or domestic water supply significance and subsequently have been classified as an ORW by the board. has the meaning set out in 75-5-103, MCA.
 - (21) remains the same.
- reporting values" (RRV) means the values listed as reporting values in department Circular WQB 7, and are the detection levels that must be achieved in reporting ambient monitoring results to the department unless otherwise specified in a permit, approval or authorization issued by the department detection level that must be achieved in reporting surface water or ground water monitoring or compliance data to the department unless otherwise specified in a permit, approval or authorization issued by the department. The RRV is the department's best determination of a level of analysis that can be achieved by the majority of commercial, university or governmental laboratories using EPA approved methods or methods approved by the department. The RRV is listed in Circular DEQ-7.
 - (23) remains the same.

- (24) "Toxic parameters" means the parameters listed as $\frac{\text{toxins}}{\text{toxic}}$ in department Circular $\frac{\text{WQB}}{\text{DEQ}}$ -7.
- (25) "Trigger values" means the values listed as trigger values in department Circular $\frac{WQB}{DEQ}$ -7 for parameters categorized as toxic, and are used to determine if proposed activities will cause degradation.
 - (26) The board adopts and incorporates by reference:
- (a) department Circular WOB DEO-7, entitled "Montana Numeric Water Quality Standards" (January 2004 February 2006 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters; and
- (b) department Circular DEQ-4, entitled "Montana Standards for Subsurface Wastewater Treatment Systems" (2004 edition), which establishes technical standards for construction of subsurface wastewater treatment systems; and
- (b) and (c) remain the same, but are renumbered (c) and (d).

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

The proposed amendments adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The Board is proposing to modify the definition of "outstanding resource water" (ORW) in this Subchapter to reflect the statutory definition, which controlling. The proposed modification of the definition of "required reporting values" is necessary for consistency with the definition in the new Circular DEQ-7, and to more clearly indicate where a person can find the specific values. proposed amendments also adopt the current Department Circular DEQ-4, which contains siting and design standards for subsurface wastewater systems. The adoption of Department Circular DEQ-4 is necessary to make the design standards for wastewater systems in this subchapter consistent with the standards adopted by the Board for other Department programs.

17.30.705 NONDEGRADATION POLICY--APPLICABILITY AND LIMITATION LEVEL OF PROTECTION (1) remains the same.

- (2) Department review of proposals for new or increased sources will determine the level of protection required for the impacted water as follows:
 - (a) remains the same.
- (b) For high quality waters, degradation may be allowed only according to the procedures in ARM 17.30.708. These rules apply to any activity that may cause degradation of high quality waters, for any parameter, unless the changes in existing water quality resulting from the activity are determined to be nonsignificant under ARM $\underline{17.30.670}$, 17.30.715 or 17.30.716. If degradation of high quality waters is allowed, the department will assure that within the United States geological survey hydrologic unit upstream of the proposed activity, there shall

be achieved the highest statutory and regulatory requirements for all point and nonpoint sources. This assurance will be achieved through ongoing administration by the department of mandatory programs for control of point and nonpoint discharges.

(c) and (3) remain the same.

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

REASON: The Board is amending ARM 17.30.705 to clarify that discharges of water from coal bed methane, which are determined to be "nonsignificant" under ARM 17.30.670, do not need an authorization to degrade. This amendment simply reflects existing statutory requirements, but is necessary here to provide a clear statement of the law regarding nondegradation.

- 17.30.706 INFORMATIONAL REQUIREMENTS FOR NONDEGRADATION SIGNIFICANCE/AUTHORIZATION REVIEW (1) Any person proposing an activity that may cause degradation is responsible for compliance with 75-5-303, MCA. Except as provided in (2) and (3), a person may either:
 - (a) remains the same.
- (b) submit an application to the department pursuant to $\frac{4}{3}$, for the department to make the determination.
- (2) The department will determine whether a proposed activity may cause degradation based on information submitted by the applicant for all activities that are permitted, approved, licensed, or otherwise authorized by the department. If the department determines that additional information is necessary to determine whether the activity is nonsignificant according to criteria established by the board, the department may require the applicant to provide the information in (3)(a) through (e).
- (3) Any person proposing to discharge unaltered ground water into surface or ground water for purposes of developing coal bed methane must complete a department "Application for Determination of Significance", as described in (4), unless the person applies for a permit pursuant to ARM Title 17, chapter 30, subchapter 13. The department shall review the application and determine whether the discharge is nonsignificant according to criteria established by the board. If the department determines that the discharge is nonsignificant, the department shall issue a "Determination of Nonsignificance", which must include any conditions or limitations on the discharge that are reasonably necessary to ensure compliance with its determination. No person may violate the conditions or limitations included in the department's "Determination of Nonsignificance" and any violation of those conditions or limitations constitutes degradation in violation of 75 5 605(1)(d), MCA.
- $\frac{(4)}{(3)}$ Any person proposing an activity or class of activities that may cause degradation and is not an activity included under (2) or $\frac{(3)}{(3)}$ may complete a department "Application for Determination of Significance". Information required on for

the application includes, but is not limited to, the following:

- (a) through (c) remain the same.
- (d) an analysis of the existing water quality of the receiving water, and any other downstream or downgradient waters which may be reasonably expected to be impacted, including natural variations and fluctuations in the parameter(s) which may change as a result of the proposed activity; or
 - (e) remains the same.
- $\frac{(5)}{(4)}$ The department will review an "Application for Determination of Significance" <u>submitted under (3)</u> and make a determination whether the proposed change in water quality is nonsignificant according to ARM 17.30.715 or 17.30.716 within 60 days of receipt of the completed application.
- (6) through (8)(k) remain the same, but are renumbered (5) through (7)(k).
- (9) (8) (a) An applicant must demonstrate that the proposed activity will result in important economic or social development that exceeds the costs to society of allowing the proposed change in water quality.
- (a) Factors to be addressed in the application may include, but are not limited to, the positive and negative effects of the following:
 - (i) through (ix) remain the same.
- (b) Factors included in the demonstration required in (8) (a) above must be quantified whenever this can be done reliably and cost-effectively. Other factors, which cannot be quantified, may be represented by an appropriate unit of measurement. If the department determines that more information is required, the department may require additional information from the applicant or seek such additional information from other sources.
- (10) through (13) remain the same, but are renumbered (9) through (12).
- $\frac{(14)}{(13)}$ The board hereby adopts and incorporates by reference ARM 17.30.1323, as amended on February 14, 2003, which sets forth signature and certification requirements for MPDES permit applications. A copy of ARM 17.30.1323 may be obtained from the Department of Environmental Quality, P.O. Box 200901, Helena, MT 59620-0901.

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

REASON: The Board is proposing two amendments to the informational requirements in ARM 17.30.706 regarding the Department's determination of "significance" under Montana's nondegradation laws. First, the Board is proposing to delete ARM 17.30.706(3) because the requirements under that section are no longer necessary. At the time the section was adopted, it was not clear whether discharges of unaltered ground water from coal bed methane wells were subject to permit requirements under the federal Clean Water Act (CWA) and Montana's delegated CWA permit program. As a result, the Board adopted the provisions of (3) to ensure that all discharges from CBM wells complied

with Montana's nondegradation requirements. Subsequent to the Board's action, the U.S. Court of Appeals for the Ninth Circuit clarified that discharges from coal bed methane wells must be regulated under a CWA permit. Consequently, the law is now settled. All CBM dischargers must obtain a Montana pollutant discharge elimination system (MPDES) permit, which contains effluent limits that require compliance with Montana's water quality standards and nondegradation laws. Accordingly, requiring a separate nondegradation review for CBM discharges under ARM 17.30.706 is no longer necessary.

Second, the Board is proposing to amend ARM 17.30.706 to provide the Department the authority to request the information specified in the rule when issuing MPDES permits. Currently, ARM 17.30.706(2) limits the Department's ability to obtain information to the "information submitted by the applicant" under the state's MPDES permit application rules. The information required from an applicant under the MPDES rules is often inadequate for purposes of providing information on the ambient quality of the receiving stream. For this reason, the Board is amending ARM 17.30.706(2) to provide the Department the discretion to obtain additional information from a permit applicant for purposes of determining "significance" under the nondegradation rules.

The reference to February 14, 2003 is added to (13) at the request of the Office of the Secretary of State, in order to clarify that the incorporation by reference of another state rule is limited to the edition of the rule in effect at the time of its incorporation.

17.30.708 DEPARTMENT PROCEDURES FOR ISSUING PRELIMINARY AND FINAL DECISIONS REGARDING AUTHORIZATIONS TO DEGRADE

- (1) remains the same.
- (2) The preliminary decision must include the following information, if applicable:
 - (a) remains the same.
- (b) the level of protection required, e.g., for high-quality waters or ORW;
 - (c) through (8) remain the same.

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

REASON: The Board is amending ARM 17.30.708 to strike the term "ORW" from the rule establishing procedures for the Department's decision to authorize degradation. The amendment is necessary because the Department is statutorily prohibited from authorizing degradation of ORWs.

17.30.715 CRITERIA FOR DETERMINING NONSIGNIFICANT CHANGES IN WATER QUALITY (1) The following criteria will be used to determine whether certain activities or classes of activities will result in nonsignificant changes in existing water quality due to their low potential to affect human health or the environment. These criteria consider the quantity and strength

of the pollutant, the length of time the changes will occur, and the character of the pollutant. Except as provided in (2) $\frac{1}{2}$ this rule, changes in existing surface or ground water quality resulting from the activities that meet all the criteria listed below are nonsignificant, and are not required to undergo review under 75-5-303, MCA:

- (a) and (b) remain the same.
- discharges containing toxic parameters or nutrients, except as specified in (1)(d) and (e) below, which will not cause changes that equal or exceed the trigger values in department Circular \(\text{WQB}\) \(\text{DEQ}-7\). Whenever the change exceeds the trigger value, the change is not significant if the resulting concentration outside of a mixing zone designated by the department does not exceed 15% of the lowest applicable standard;
 - (d) through (3) remain the same.
- (4) The board adopts and incorporates by reference department Circular WOB 7, entitled "Montana Numeric Water Quality Standards" (January 2004 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters.

AUTH: 75-5-301, 75-5-303, MCA

IMP: 75-5-303, MCA

REASON: The proposed amendments adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. Section (4) is proposed for deletion because it is unnecessary. Circular DEQ-7 is adopted, for purposes of this subchapter, in ARM 17.30.702.

CATEGORIES OF ACTIVITIES THAT 17.30.716

- NONSIGNIFICANT CHANGES IN WATER QUALITY (1) remains the same.

 (2) Except as provided in (5), a subsurface wastewater treatment system (SWTS) that meets all of the criteria in (2)(a) falls within one of the categories in (2)(b) is nonsignificant.
- The SWTS, including primary and replacement (a) drainfields must meet all of the following criteria:
 - (i) through (v) remain the same.
- the SWTS must meet the current design standards defined in ARM Title 17, chapter 36, subchapter 3 and department Circular DEQ-4, 2004 edition; and
 - (vii) through (6)(d) remain the same.

75-5-301, 75-5-303, MCA IMP: 75-5-303, 75-5-317, MCA

REASON: The reference to the specific edition of Circular DEQ-4 is proposed for deletion because it is unnecessary. ARM 17.30.702 specifies, for purposes of this subchapter, the edition of Circular DEQ-4 that is applicable.

- 17.30.1001 DEFINITIONS The following definitions, in addition to those in 75-5-103, MCA, apply throughout this subchapter:
 - (1) remains the same.
- (2) through (14) remain the same, but are renumbered (3) through (15).
- (15)(2) "WQB DEQ-7" means department Circular WQB DEQ-7, entitled "Montana Numeric Water Quality Standards" (December 2002 February 2006 edition), which establishes water quality standards for toxic, carcinogenic, radioactive, bioconcentrating, nutrient, and harmful parameters.
- $\frac{(16)}{(a)}$ The board adopts and incorporates by reference department Circular $\frac{WQB}{DEQ}$ -7, entitled "Montana Numeric Water Quality Standards" ($\frac{January}{January}$ $\frac{2004}{January}$ $\frac{January}{January}$ $\frac{2006}{January}$ edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters.

AUTH: 75-5-201, 75-5-401, MCA IMP: 75-5-301, 75-5-401, MCA

<u>REASON:</u> The proposed amendments adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

- 17.30.1006 CLASSIFICATIONS, BENEFICIAL USES, AND SPECIFIC STANDARDS FOR GROUND WATERS (1) Class I ground waters are those ground waters with a natural specific conductance less than or equal to 1,000 microSiemens/cm at 25°C.
 - (a) through (a) (v) remain the same.
- (b) Except as provided in ARM 17.30.1005(2), a person may not cause a violation of the following specific water quality standards in Class I ground water:
- (i) the human health standards for ground water listed in WQB DEQ-7;
- (ii) for concentrations of parameters for which human health standards are not listed in $\frac{WQB}{DEQ}$ -7, no increase of a parameter to a level that renders the waters harmful, detrimental or injurious to the beneficial uses listed for Class I water. The department may use any pertinent credible information to determine these levels; and
 - (iii) remains the same.
- (2) Class II ground waters are those ground waters with a natural specific conductance that is greater than 1,000 and less than or equal to 2,500 microSiemens/cm at 25°C.
 - (a) through (a) (v) remain the same.
- (b) Except as provided in ARM 17.30.1005(2), a person may not cause a violation of the following specific water quality standards for Class II ground water:
- (i) the human health standards for ground water listed in WOB DEO-7;
- (ii) for concentrations of parameters for which human health standards are not listed in $\frac{WQB}{DEQ}$ -7, no increase of a parameter to a level that renders the waters harmful,

detrimental or injurious to the beneficial uses listed for Class II water. The department may use any pertinent credible information to determine these levels; and

- (iii) remains the same.
- (3) Class III ground waters are those ground waters with a natural specific conductance that is greater than 2,500 and less than or equal to 15,000 microSiemens/cm at 25°C.
 - (a) through (a) (iv) remain the same.
- (b) Except as provided in (5) and ARM 17.30.1005(2) and 17.30.1006(5), a person may not cause a violation of the following specific water quality standards for Class III ground water:
- (i) the human health standards listed in WQB DEO-7, except that the nitrate nitrogen and nitrate plus nitrite nitrogen standards listed in WQB DEO-7 do not apply to ground waters with a specific conductance equal to or greater than 7,000 microSiemens/cm at 25°C. The nitrate nitrogen and nitrate plus nitrite nitrogen standards for these waters are each 50 mg/l; and
- (ii) for concentrations of parameters for which human health standards for ground water are not listed in $\frac{WQB}{DEQ}$ -7, no increase of a parameter to a level that renders the waters harmful, detrimental or injurious to the beneficial uses listed for Class III water. The department may use any pertinent credible information to determine these levels.
 - (c) remains the same.
- (4) Class IV ground waters are those ground waters with a natural specific conductance greater than 15,000 microSiemens/cm at 25°C .
 - (a) remains the same.
- (b) Except as provided in $\underline{(5)}$ and ARM 17.30.1005(2) and $\underline{17.30.1006(5)}$, a person may not cause a violation of the following specific water quality standards for Class IV ground water:
- (i) the human health standards for parameters categorized as carcinogens in $\frac{WQB}{DEQ}$ -7;
- (ii) for concentrations of parameters in WQB DEQ-7 which are not listed as carcinogens, no increase of a parameter to a level that would adversely affect existing beneficial uses. The nitrate nitrogen and nitrate plus nitrite nitrogen standards are each 50 mg/l;
- (iii) for concentrations of parameters for which human health standards are not listed in $\frac{WQB}{DEQ}$ -7, no increase of a parameter to a level that would adversely affect existing beneficial uses. The department may use any pertinent credible information to determine these levels.
 - (c) and (5) remain the same.
- (6) The ground water quality standards for metal parameters are based on the dissolved portion (after filtration through a 0.45 micron filter) of the contaminant in the ground water. The ground water quality standards for other parameters in department Circular $\frac{WQB}{DEQ}$ -7 are based upon unfiltered samples. For inorganic parameters, compliance with standards based on filtered samples must be assumed if analyses using the

total recoverable method demonstrates compliance with the numerical standards.

(7) The board adopts and incorporates by reference department Circular WQB 7, entitled "Montana Numeric Water Quality Standards" (January 2004 edition), which establishes water quality standards for toxic, carcinogenic, bioconcentrating, nutrient, radioactive, and harmful parameters.

AUTH: 75-5-301, 80-15-105, 80-15-201, MCA

IMP: 75-5-301, 80-15-201, MCA

<u>REASON:</u> The proposed amendments adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The reference to the specific edition of WQB-7 is proposed for deletion because it is unnecessary. ARM 17.30.1001 specifies, for purposes of this subchapter, the edition of DEQ-7 that is applicable.

- 17.30.1007 SAMPLE COLLECTION, PRESERVATION, AND ANALYSIS METHODS (1) Methods of sample collection, preservation and sample analysis used to determine compliance with the standards in this subchapter must be in accordance with 40 CFR 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants" (July, 1997), or the following:
- (a) EPA-SW-846, Third Edition (November 1986), as amended by Updates I (July 1992), II (September 1994), IIA (August 1993), IIB (January, 1995), and III (December 1996), and IIIA (May 1999) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods";
 - (b) through (e) remain the same.
- (2) Analyses of parameters to determine compliance with ground water standards must comply with the required reporting values given in \(\frac{\text{WQB}}{DEQ}\)-7.
- (3) The board adopts and incorporates by reference the following publications:
- (a) department Circular WQB 7, entitled "Montana Numeric Water Quality Standards", January 2004 edition;
- (b) through (e) remain the same, but are renumbered (a) through (d).
- (4) Copies of the publications in <u>(3)</u>(a) through (e), <u>(d)</u> above are available at the Department of Environmental Quality, 1520 East Sixth Avenue, P.O. Box 200901, Helena, <u>Montana MT</u> 59620-0901.

AUTH: 75-5-301, MCA IMP: 75-5-301, MCA

<u>REASON:</u> The proposed amendments adopt the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The amendments also incorporate a new EPA update for the test methods for evaluating solid waste, which is necessary to be consistent with current EPA methods.

- 17.36.331 NON-PUBLIC WATER SUPPLY SYSTEMS: WATER QUALITY
- (1) For non-public water supply systems, the following water quality requirements must be met:
- (a) The applicant shall demonstrate that water quality is sufficient for the proposed subdivision. The reviewing authority may not approve a proposed water supply system if there is evidence that, after appropriate treatment, the concentration of any water quality constituent exceeds the human health standards in department Circular WQB DEQ-7, 2001 edition or the maximum contaminant levels established in ARM Title 17, chapter 38, subchapter 2.
- The applicant shall obtain samples from wells in the proposed subdivision and shall provide analyses of the samples to the reviewing authority. If no wells exist in the proposed subdivision, the reviewing authority may accept samples from nearby water wells that are completed in the same aquifer as that proposed for the subdivision water supply. The samples may not be older than one year prior to the date of application. Water quality data must show the concentration of nitrate (as nitrogen) and specific conductance. The reviewing authority may require testing of wells located near the proposed subdivision for additional constituents for which human health standards are listed in department Circular WQB DEQ-7, 2001 edition or in ARM Title 17, chapter 38, subchapter 2, if the reviewing authority believes that those constituents may be present in harmful Analyses must be conducted by a laboratory concentrations. certified by the department of public health and human services for analyses of water samples for public water systems.
 - (i) through (f) remain the same.

AUTH: 76-4-104, MCA IMP: 76-4-104, MCA

<u>REASON:</u> This proposed amendment to Department subdivision rules adopts the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

<u>17.36.335</u> NON-PUBLIC WATER SUPPLY SYSTEMS: EXISTING SYSTEMS (1) remains the same.

- (2) The applicant shall submit information to allow the reviewing authority to review the quality, quantity, and dependability of the existing system.
- (a) The applicant shall submit, for each existing water supply source, water quality analyses for nitrate (as nitrogen) and specific conductance. If an existing well is currently being used as a potable water supply within a proposed subdivision, a total coliform analysis must also be conducted. The nitrate and specific conductance sample may not be older than one year prior to the date of the application. The coliform sample may not be older than six months prior to the date of application. If an existing well is not currently used as a potable water supply but will be converted to a potable

water supply, a total coliform analysis must be conducted when it is put into use. The analysis must be performed by a laboratory certified by the department of public health and human services for analyses of water samples for public water systems. The reviewing authority may not approve the use of an existing system if there is evidence that, after appropriate treatment, the concentration of any ground water constituent exceeds the human health standards in department Circular WQB DEQ-7, 2001 edition, or the maximum contaminant levels established in ARM Title 17, chapter 38, subchapter 2.

(b) remains the same.

AUTH: 76-4-104, MCA IMP: 76-4-104, MCA

REASON: See Reason for ARM 17.36.331, above.

 $\underline{17.36.336}$ ALTERNATE WATER SUPPLY SYSTEMS (1) through (3) remain the same.

- (4) The reviewing authority may require that the applicant collect information regarding quality, quantity, and dependability of the water supply at specified times of the year.
- (a) The reviewing authority may require water quality sampling to test for direct influence by surface water. Such sampling may include:
 - (i) remains the same.
- (ii) testing for parameters with human health standards listed in department Circular WQB DEQ-7, 2001 edition;
 - (iii) through (5)(c) remain the same.

AUTH: 76-4-104, MCA IMP: 76-4-104, MCA

REASON: See Reason for ARM 17.36.331, above.

- 17.36.345 ADOPTION BY REFERENCE (1) For purposes of this chapter, the department $\frac{1}{1}$ adopts and incorporates by reference the following documents. All references to these documents in this chapter refer to the edition set out below:
 - (a) through (d) remain the same.
- (e) Department Circular $\frac{WQB}{DEQ}$ DEQ-7, "Montana Numeric Water Quality Standards", $\frac{2001}{February}$ Eebruary 2006 edition;
 - (f) through (2) remain the same.

AUTH: 76-4-104, MCA IMP: 76-4-104, MCA

REASON: See Reason for ARM 17.36.331, above.

- 17.55.102 DEFINITIONS In this subchapter the following terms have the meanings indicated below and are supplemental to the definitions in 75-10-701, MCA:
 - (1) through (5)(c) remain the same.

- (6) The department adopts and incorporates by reference:
- (a) department Circular DEQ-4, entitled "Montana Standards for Subsurface Wastewater Treatment Systems", 2004 edition, which establishes technical standards for construction of subsurface wastewater treatment systems; and
- (b) Department Circular DEQ-7, "Montana Numeric Water Quality Standards", February 2006 edition.

AUTH: 75-10-702, 75-10-704, MCA IMP: 75-10-702, 75-10-704, MCA

REASON: This proposed amendment to Department CECRA rules adopts the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The proposed amendments also adopt the current Department Circular DEQ-4, which contains siting and design standards for subsurface wastewater systems. The adoption of DEQ-4 and the revised DEQ-7 are necessary to make the CECRA subsurface wastewater system design standards and water quality standards consistent with the standards used by other Department programs.

17.55.111 FACILITY RANKING (1) remains the same.

- (2) A maximum priority designation must be given to a facility that exhibits one or more of the following characteristics:
- (a) documented release to surface water in a drinking water intake that is a public drinking water supply, with:
- (i) a documented or probable exceedance of a Montana water quality human health standard listed in department Circular WQB DEQ-7, entitled "Montana Numeric Water Quality Standards" (November 1998 edition) or a standard established as a drinking water maximum contaminant level listed at 40 CFR 141 (1997); or
- (ii) for substances whose parameters for human health are not listed in $\frac{WQB}{DEQ}$ -7 or 40 CFR 141 (1997), concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use;
- (b) documented release to ground water in a drinking water well that is a public drinking water supply, with:
- (i) a documented or probable exceedance of a Montana water quality human health standard listed in department Circular \(\frac{WQB}{DEQ}\)-7, entitled "Montana Numeric Water Quality Standards" \(\frac{(November 1998 edition)}{(November 1998 edition)}\) or a standard established as a drinking water maximum contaminant level listed at 40 CFR 141 (1997); or
- (ii) for substances whose parameters for human health are not listed in $\frac{WQB}{DEQ}$ -7 or 40 CFR 141 (1997), concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use;
- (c) documented release into a drinking water line that is part of a public drinking water supply, with:
- (i) a documented or probable exceedance of a Montana water quality human health standard listed in department Circular \(\text{WQB}\)\)
 \(\text{DEO}\)-7, entitled "Montana Numeric Water Quality Standards" \(\text{(November 1998 edition)}\) or a standard established as a drinking

water maximum contaminant level listed at 40 CFR 141 (1997); or

- (ii) for substances whose parameters for human health are not listed in $\frac{WQB}{DEQ}$ -7 or 40 CFR 141 (1997), concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use;
- (d) documented release to surface water in a drinking water intake that is a domestic or commercial drinking water supply, with:
- (i) a documented or probable exceedance of a Montana water quality human health standard listed in department Circular \(\frac{WQB}{DEQ}\)-7, entitled "Montana Numeric Water Quality Standards" \(\frac{(November 1998 edition)}{(November 1998 edition)}\) or a standard established as a drinking water maximum contaminant level listed at 40 CFR 141 (1997); or
- (ii) for substances whose parameters for human health are not listed in $\overline{\text{WQB}}$ $\overline{\text{DEQ}}$ -7 or 40 CFR 141 (1997), concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use;
- (e) documented release to ground water in a drinking water well that is a domestic or commercial drinking water supply, with:
- (i) a documented or probable exceedance of a Montana water quality human health standard listed in department Circular \(\frac{\text{WQB}}{\text{DEQ}}\)-7, entitled "Montana Numeric Water Quality Standards" \(\frac{(\text{November 1998 edition)}}{\text{or a standard established as a drinking water maximum contaminant level listed at 40 CFR 141 (1997); or
- (ii) for substances whose parameters for human health are not listed in $\frac{WQB}{DEQ}$ -7 or 40 CFR 141 (1997), concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use;
- (f) documented release into a drinking water line that is a domestic or commercial drinking water supply, with:
- (i) a documented or probable exceedance of a Montana water quality human health standard listed in department Circular \(\frac{WQB}{DEQ}\)-7, entitled "Montana Numeric Water Quality Standards" \(\frac{(November 1998 edition)}{(November 1998 edition)}\) or a standard established as a drinking water maximum contaminant level listed at 40 CFR 141 (1997); or
- (ii) for substances whose parameters for human health are not listed in $\frac{WQB}{DEQ}$ -7 or 40 CFR 141 (1997), concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use;
 - (q) through (i) remain the same.
- (3) A high priority designation must be given to a facility whose release does not exhibit any of the characteristics provided in (2) but exhibits one or more of the following characteristics:
- (a) documented release to surface water that is a drinking water source with:
- (i) no documented or probable exceedance of a Montana water quality human health standard listed in department Circular WQB DEQ-7, entitled "Montana Numeric Water Quality Standards" (November 1998 edition) or a standard established as a drinking water maximum contaminant level listed at 40 CFR 141 (1997) in a drinking water supply intake; and
- (ii) for substances whose parameters for human health are

not listed in $\frac{WQB}{DEQ}$ -7 or 40 CFR 141 (1997), no concentration at levels that render the water harmful, detrimental, or injurious to a beneficial use in a drinking water supply intake;

- (b) documented release to ground water that is a drinking water source with:
- (i) no documented or probable exceedance of a Montana water quality human health standard listed in department Circular WQB DEO-7, entitled "Montana Numeric Water Quality Standards" (November 1998 edition) or a standard established as drinking water maximum contaminant level listed at 40 CFR 141 (1997) in a drinking water supply well; and
- (ii) for substances whose parameters for human health are not listed in $\frac{\text{WQB}}{\text{DEQ}}$ -7 or 40 CFR 141 (1997), no concentrations at levels that render the water harmful, detrimental, or injurious to a beneficial use in a drinking water supply well;

(c) through (8) remain the same.

AUTH: 75-10-702, 75-10-704, MCA IMP: 75-10-702, 75-10-704, MCA

<u>REASON:</u> This proposed amendment to Department CECRA rules adopts the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above.

17.56.507 ADOPTION BY REFERENCE (1) For purposes of this subchapter, the department hereby adopts and incorporates by reference:

- (a) Department Circular WQB DEQ-7, "Montana Numeric Water Quality Standards" (January 2002 February 2006);
 - (b) through (3) remain the same.

AUTH: 75-11-319, 75-11-505, MCA IMP: 75-11-309, 75-11-505, MCA

REASON: This proposed amendment to the Department's underground storage tank rules adopts the revisions to Circular WQB-7 (renamed DEQ-7). The revisions to the Circular, and the reasons for them, are summarized in the Reason for ARM 17.30.502, above. The adoption of the revised DEQ-7 is necessary to make the tanks program water quality standards consistent with the standards used by other Department programs.

4. The proposed new rules provide as follows:

NEW RULE I OUTSTANDING RESOURCE WATERS -- DESIGNATION

(1) All state surface waters located wholly within the boundaries of designated national parks or wilderness areas as of October 1, 1995, are outstanding resource waters (ORWs). Other state waters may be designated an ORW by the board following the procedures in 75-5-316, MCA, subject to approval by the legislature.

AUTH: 75-5-301, 75-5-316, MCA

IMP: 75-5-316, MCA

REASON: The Board is proposing the adoption of New Rules I and II, pertaining to outstanding resource waters (ORWs), which will be included in the rules establishing a state-wide stream classification system (ARM Title 17, chapter 30, subchapter 6). New Rule I is proposed as a means of acknowledging that certain waters within the state's stream classification system have been specially designated as an ORW in Montana's water quality statutes. The rule does not change the statutory provisions for ORWs. However, the rule is necessary to inform the regulated community, agencies of the state and federal government, and the public at large that all waters "wholly within" national parks or wilderness areas have been statutorily designated as ORWs. New Rule I also serves the purpose of establishing a "placeholder" within the Board's stream classification rules for waters that may in the future be listed as ORWs pursuant to 75-5-316, MCA.

NEW RULE II OUTSTANDING RESOURCE WATERS -- PROHIBITIONS

(1) Any new or increased point source discharge that would result in a permanent change in water quality is prohibited.

AUTH: 75-5-301, 75-5-316, MCA

IMP: 75-5-316, MCA

REASON: The Board is proposing to adopt New Rule II as part of ARM Title 17, chapter 30, subchapter 6. New Rule II simply reflects the statutory prohibition against any "new or increased" point sources from discharging into waters designated as ORWs. The reference to the statutory prohibition in subchapter 6 is necessary in order to provide a complete list within the subchapter of the various classifications of state waters.

- 5. Concerned persons may submit their data, views or arguments, either orally or in writing, at the hearing. Written data, views or arguments may also be submitted to the Board Secretary at Board of Environmental Review, 1520 E. Sixth Avenue, P.O. Box 200901, Helena, Montana, 59620-0901; faxed to (406) 444-4386; or emailed to ber@mt.gov, no later than 5:00 p.m., December 6, 2005. To be guaranteed consideration, mailed comments must be postmarked on or before that date.
- 6. Katherine Orr, attorney for the Board, or another attorney for the Agency Legal Services Bureau, has been designated to preside over and conduct the hearing.
- 7. The Board and Department maintain a list of interested persons who wish to receive notices of rulemaking actions proposed by this agency. Persons who wish to have their name added to the list shall make a written request that includes the name and mailing address of the person to receive notices and specifies that the person wishes to receive notices regarding:

air quality; hazardous waste/waste oil; asbestos control; water/wastewater treatment plant operator certification; solid waste; junk vehicles; infectious waste; public water supplies; public sewage systems regulation; hard rock (metal) mine reclamation; major facility siting; opencut mine reclamation; strip mine reclamation; subdivisions; renewable energy grants/loans; wastewater treatment or safe drinking water CECRA; revolving grants and loans; water quality; underground/above ground storage tanks; MEPA; or general procedural rules other than MEPA. Such written request may be mailed or delivered to the Board Secretary at Board of Environmental Review, 1520 E. Sixth Ave., P.O. Box 200901, Helena, Montana 59620-0901; faxed to (406) 444-4386; emailed to ber@mt.gov; or may be made by completing a request form at any rules hearing held by the Board or Department.

8. The bill sponsor notice requirements of 2-4-302, MCA, do not apply.

Reviewed by:

BOARD OF ENVIRONMENTAL REVIEW

<u>James M. Madden</u>

JAMES M. MADDEN

Rule Reviewer

BY: <u>Joseph W. Russell</u>

JOSEPH W. RUSSELL, M.P.H.,

Chairman

DEPARTMENT OF ENVIRONMENTAL

QUALITY

BY: <u>Richard H. Opper</u>

RICHARD H. OPPER, Director

Certified to the Secretary of State October 17, 2005.